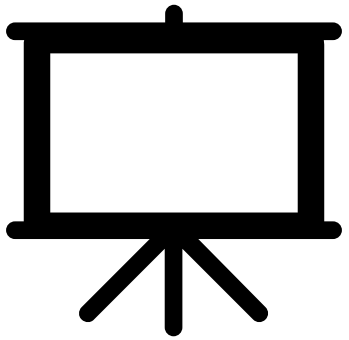


Early Treat!

For everyone who pops on at 2:45pm

DISCUSSION OF VIDEO IDEA FOR IN-WATER SAMPLING (PER FEEDBACK FROM WORKING GROUP MEMBERS)

FILM SEGMENT 1

INTRO AND AERIAL FILMING OF SAMPLING VESSEL AND SAMPLING ACTION

Scene Summary:

Working Draft Storyboard Concept

1. Low water approach with UAV to core sampling vessel
2. UAV rises in elevation and zooms out to capture full view of core sampling vessel as it sets up over a sample location

Flight #1

3. UAV rotates around vessel and films sampling action of the vibracore with the core advancing to depth below the water surface

Flight #2

4. UAV rotates around vessel while filming the retrieval of the core
5. Fly-in/zoom-in to vessel deck to transition to Film Segment 2

Flight #3

Segment Time: 5 minutes

Narration Summary:

1. Introduce audience to what they will be observing – the life of a PH sample core from start to finish; introduce Cathedral Park RD area and the sampling they will observe;
2. Describe specialized sampling vessel and what it is equipped with - a hoist and a vibracore sampler and describe how the vibracore works
3. Describe the sampling sequence; the core tube enters and starts to disappear below the water; Describe vibracore pneumatic action and how it collects inside the core tube below the mudline of the river bottom; show the retrieval process and how the sediment is retained inside the tube (with sand trap) as it is extracted out of the river bottom;
4. Describe how the core is handled carefully as it is raised and lowered back to the vessel deck, secured and kept cooled
5. Narrative under Scene 4 will transition into Scene 5 and end

All photos courtesy of CDM Smith

FILM SEGMENT 2

ON-VESSEL SAMPLE CORE MANAGEMENT/CORE TRANSFER TO PROCESSING FACILITY

Scene Summary:

Working Draft Storyboard Concept

1. Capture of Core Sampling being hoisted onto the deck of vessel and a cap placed on the bottom of the core tube.
2. Measurement of sediment in tube; may require siphoning of standing water with a pump. Top cap placed on tube and secured in upright position in ice; Show the boat telemetry screen which is used to confirm core sample location before transporting?
3. Show transport to sample core offload area and offloading the core onto transfer dolly/table/vehicle
4. Show intact core entering process warehouse, pan around inside of warehouse and end film zooming into core and cutting tool to transition to Film Segment 3

Segment Time: 5 minutes

Narration Summary:

1. Describe how the core is handled carefully so that contents are not disturbed with the water and sediment inside – goal is to keep an intact and undisturbed sample core for accurate processing.
2. Describe measurements and actions taken to ready the core for transport.
3. Describe the transport setup; explain the need to carefully avoid vibration and disturbance of the core as much as possible and how adhering to safety measures for lifting and transport are closely followed during this step.
4. Describe warehouse equipment contents – staff of 5, their roles; various equipment – coolers, core processing table, disposal drums/containers for IDW. Describe the core cutting tool and transition to Film Segment 3

5

All photos courtesy of CDM Smith

FILM SEGMENT 3

CUTTING THE CORE AND RECORDING VISUAL OBSERVATIONS AND PERFORMING TESTS (AIR MONITORING/PHYSICAL TESTS)

Working Draft Storyboard Concept

Scene Summary:

1) Capture core cutting process

2) Zoom into exposed sediment and show PID testing being performed

3) Show how the white board is used to capture sediment core sample ID information; date of sample, length of core and recovery etc..

4) Show measurement tape and length of core; zoom into geologist reviewing the lithology and recording the observations on the lithology form.

5) Capture geologist performing physical tests of the lithology (spoon test, thread roll) etc..

6) Capture geologist performing shake test when potential NAPL is observed.

7) Transition scene to the sampler and Segment 4

Segment Time: 8 minutes

Narration Summary:

1) Describe extraction of core; care taken to minimize core disturbance and not penetrate the sample with the core cutter.

2) Describe PID, its purpose (used to inform level of volatiles in the sample and for health and safety monitoring) what the PID reading is and how that compares to other cores for volatiles and H&S trigger levels

3) Describe the sample recording and observation process with the white board, describe the measuring tape and its purpose for evaluating the length of recovered core.

4) Describe the geologist job of describing the various components for characterizing the core.

5) Describe physical tests being performed by the geologist and what they help inform for additional core characterization.

6) Describe what NAPL is, why its presence is important to observe/characterize, and what a shake test shows the field team. (Wardah to complete)

7) End narration with an intro to the sampling phase and transition to Segment 4

7

All photos courtesy of CDM Smith

The Life of a Portland Harbor Sediment Core

Working Draft Storyboard Concept

FILM SEGMENT 4

SAMPLING THE CORE AND MANAGING THE SAMPLES FOR SHIPMENT TO ANALYTICAL LABORATORY ANALYSIS

Working Draft Storyboard Concept

Scene Summary:

1) Capture sampler spooning the sample at discrete intervals into the stainless-steel bowl to homogenize the sample prior to splitting into sample jars for lab.

2) Show decontamination procedure of the sampling equipment

3) Show Sample Processing Crew preparing labels, attaching them to jars and entering sample information onto laptop

4) Show coolers being prepped with ice and sample jars being packed into the coolers and chain of custody tape/labels being applied to the packed cooler

5) Show sample cooler being carried to courier for transport to a lab and end scene with credits.

Segment Time: 5 minutes

Narration Summary:

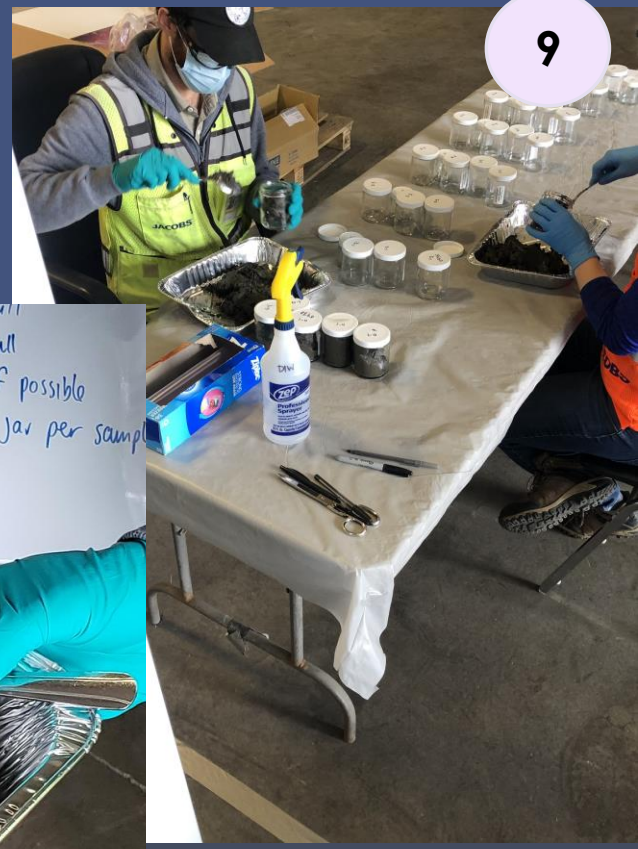
1) Describe sampling procedure and what the sampler needs to cautious about when sampling for the number of chemicals to be analyzed – sufficient volume, representative material, collecting sediment not in contact with the sidewalls of the core tube.

2) Describe the decontamination procedure and its importance

3) Describe the role of the sample processing crew – preparing labels, entering the sample ID information electronically, (Mary Lou to complete)

4) Describe the preparation of coolers, inner bags for jars so the labels do not get wet and information compromised; purpose of chain of custody seals; provide information on how certain samples go to different labs based on their capacity and capability of performing specific analysis.

5) Closing statement on how the samples from the core are now headed to the appropriate analytical labs safely packed on ice and all information organized and documented electronically. End of Film.



All photos courtesy of CDM Smith

Welcome!

Cathedral Park Project Area Working Group

May Meeting!

May 27, 2021

Cathedral Park Project Area

River Flow
Cathedral Park Project Area
Navigation Channel
MNR
ENR
Cap
Dredge
Dredge in Nav-FMD
Dredge with Cap

0 500 1,000
Feet

N

Source Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Introductions!

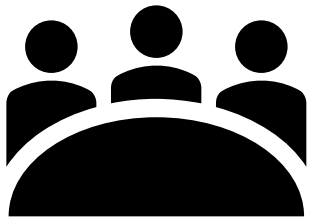
- **Laura will introduce existing members!**
- **For new members, please consider sharing:**
  - Your **name**
  - Your **organization** or **affiliation** ('interested community member' is just fine!)
  - Your **preferred pronouns** (such as: she/her/hers, he/him/his, they/their/theirs)
  - Your **main reason** for joining this Cathedral Park Project Area Working Group ☺

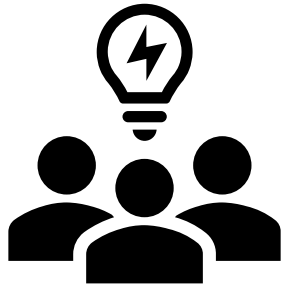
Agenda for Today

- **High level recap** of previous working group meetings
- **Discussion of educational activities**
- **Provide substantive sampling updates**
  - Discuss EPA's responses to the Willamette River Advocacy Group's (WRAG) comments on the draft Quality Assurance Project Plan (or QAPP)
  - High-level review of Technical Coordinating Team (TCT) comments on the draft QAPP and discussion of EPA's responses
- **Summarize & Discuss Next Steps** for this Working Group
  - Schedule June meeting (if needed)

Cathedral Park Project Area Working Group
High Level Recap of Previous Meetings

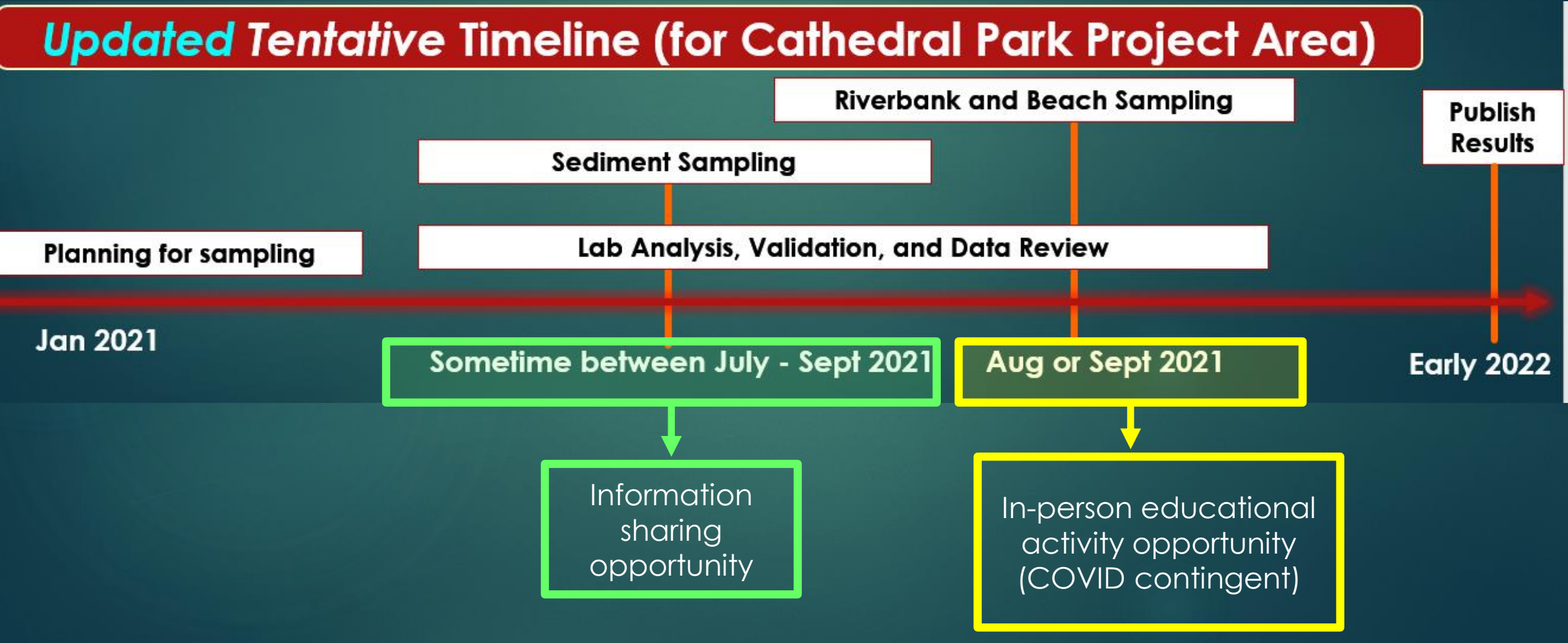
- ✓ Discussion of EPA contracting and subcontracting
- ✓ Discussion and community feedback on EPA's sampling approach
- ✓ Brainstorming and development of educational activities & tools for both in-water sampling and riverbank/beach sampling
- ✓ Supplemental information on EPA's human health & ecological risk assessments





Educational Activities Discussion!

Cathedral Park Project Area



Educational Activities Discussion!
Draft Communications Plan

- **Key Audiences *(from working group member feedback)***
  - Teachers
  - Middle and high-school students
  - University students (University of Portland and Portland Community College)
  - Interested community members
  - People who use Cathedral Park for recreation or gathering

- ***Main Goals (from working group member feedback)***
  - Build trust in the sampling process
    - Follow up with community members on the results of the sampling effort
  - Educate people about the overall Portland Harbor cleanup
  - Make a connection for students on how this sampling work relates to job opportunities

Educational Activities Discussion!

Draft Communications Plan

- **Key Activities *(from working group member feedback)***
  - **In-Water Sampling:**

    - Video – Life of a Portland Harbor Sediment Core
      - Translate video into Spanish
      - Work with community members and students for narration
      - Arrange for a 'movie viewing' of this video
  - **Riverbank & Beach Sampling:**

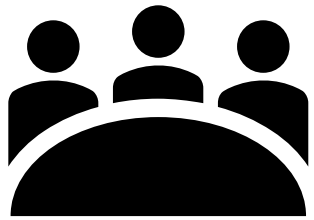
Photo Source: EPA

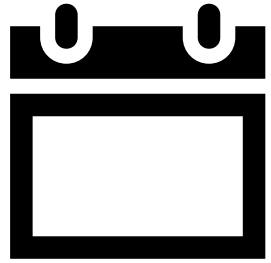
    - Community science event during at least one day of sampling
      - Community members & students collect mock samples

    - Create artwork for this sampling effort
      - Perhaps a Collaborative sculpture using macaroni for contaminants of concern

Educational Activities Discussion!
Draft Communications Plan

- ***Proposed* Initial Next Steps *(for discussion)***
  - **(All Working Group Members)** Connect with key audiences and assess interest & availability
    - Brainstorm schools and contacts for key audiences
    - Discuss how to conduct this initial outreach (any interested working group members?)
      - Laura/EPA can provide draft of initial key messages for this outreach to interested working group members
    - Report back on initial outreach to key audiences at June Working Group meeting
  - **(Laura + Josie)** Develop draft in-person education activity plan for discussion at June meeting



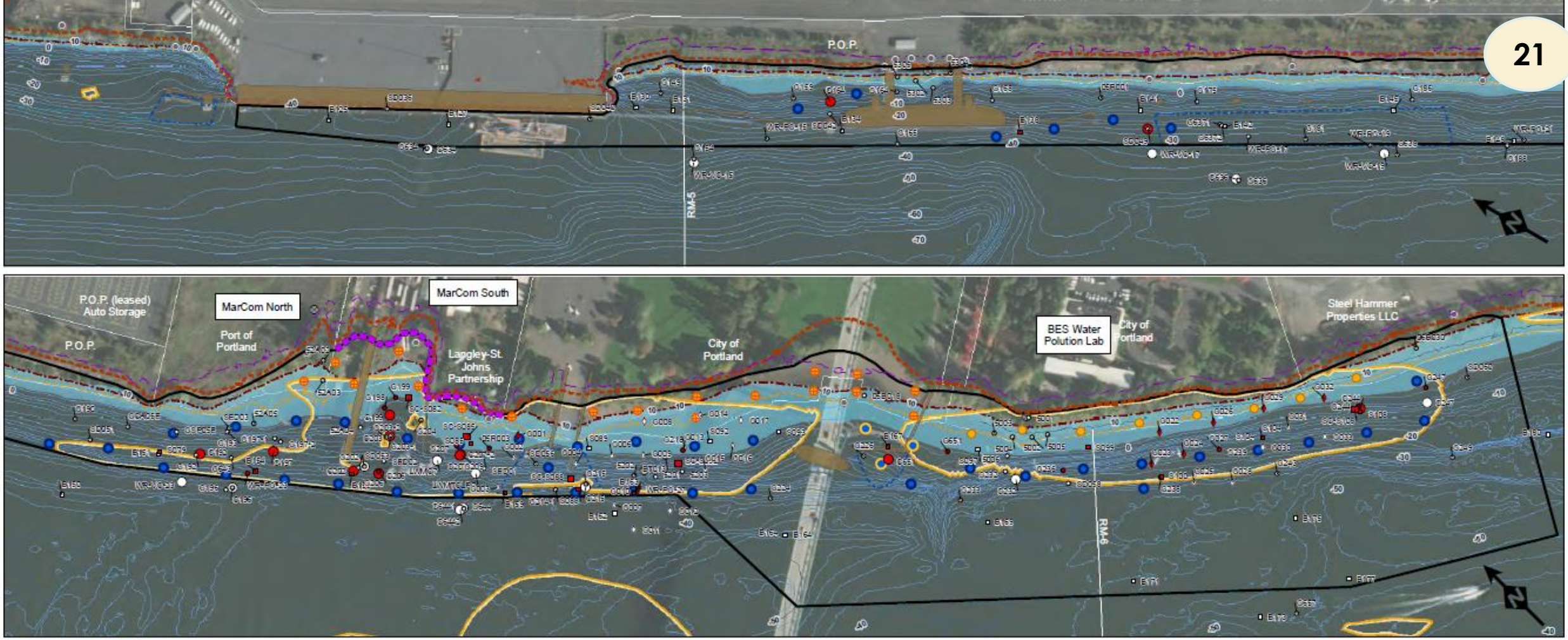


General EPA Comments to all Reviewers

- Conceptual Site Model Development will occur in future documents.
- This Quality Assurance Project Plan (QAPP) represents an initial sampling investigation with the expectation that further sampling will be required.
- The sampling locations were identified by looking at existing data in Leapfrog and applying the Preliminary Design Investigation (PDI) standards from the Remedial Design Guidelines and Considerations (RDGC).
- EPA is using its contract Laboratory Program (CLP) and the EPA Region 10 laboratory to analyze the samples.
  - The CLP laboratories performance standards are determined by the national contract.
  - The assignment of the CLP laboratories will not be made until shortly before collection of samples would start.

QAPP updates due to WRAG Comments

- Rationale for Incremental Sampling Methodology (ISM) samples being taken from 0” – 6” down.
- Added a detailed Standard Operating Procedure (SOP) for Incremental Sampling.
- Explanation of how EPA will mitigate the possibility of lab detection levels being above cleanup levels.
- Added rationale for 150’ sample separation distance.
- Acknowledged that challenges in sample collection may result in data gaps.
- Provided additional figures showing historic sample data.
- Total Organic Carbon (TOC) being collected in all samples.



Source Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 8. Historic Sample Exceedances Cathedral Park Project Area

Portland Harbor Superfund Site

QAPP updates due to Technical Coordinating Team (TCT) Comments

- Moved MarCom South riverbank sample locations to better characterize the historic ship way.
- Clarified the approach of starting with aroclor analysis then following up non-detects with congener analysis for PCBs.
- Provided figure showing locations of ISM sample increments.
- Clarified that most sediment samples will only be analyzed for Table 21 Contaminants of Concern (COCs).
- Added placeholder to coordinate with the City on use of Cathedral Park Beach.

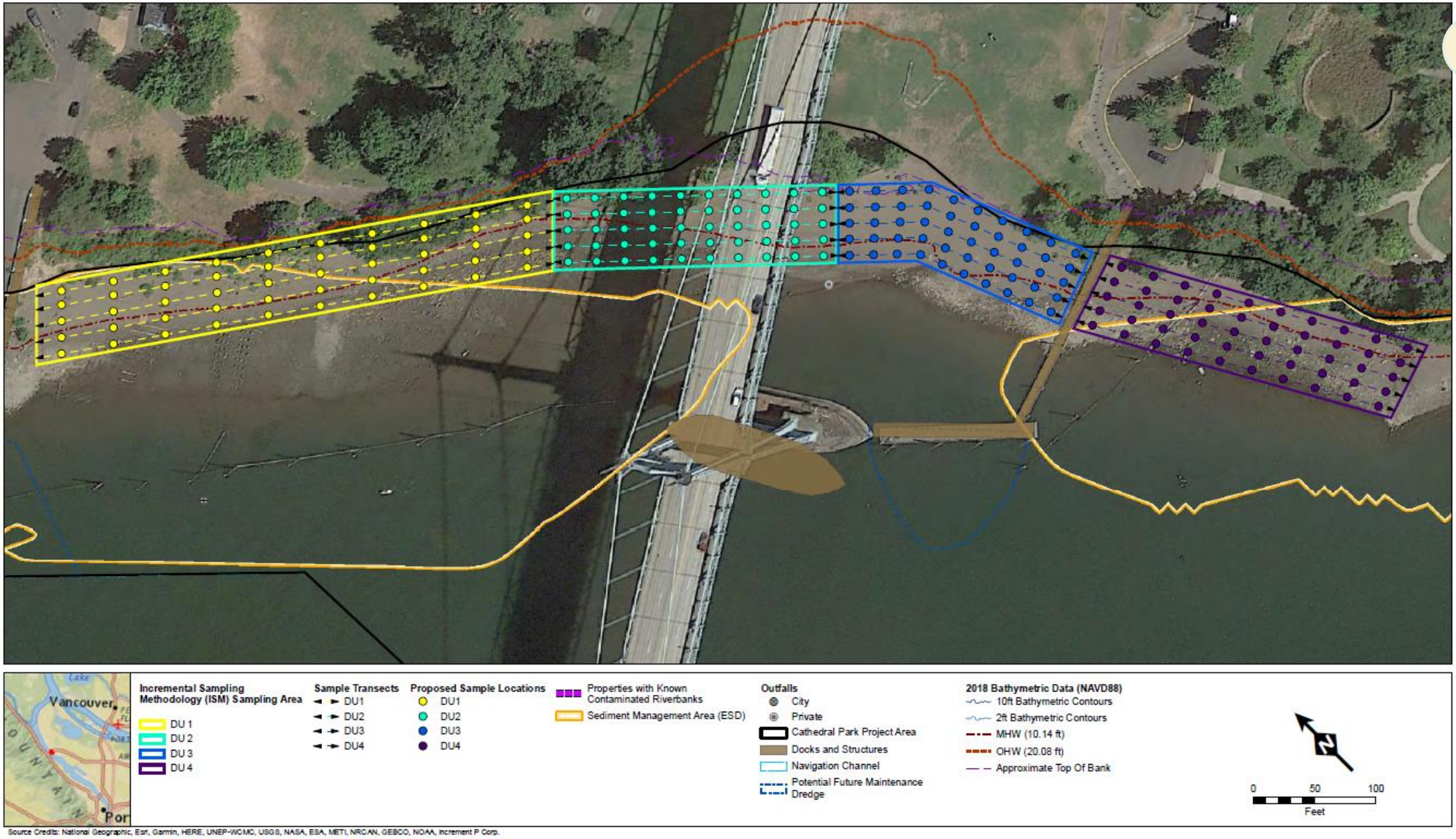
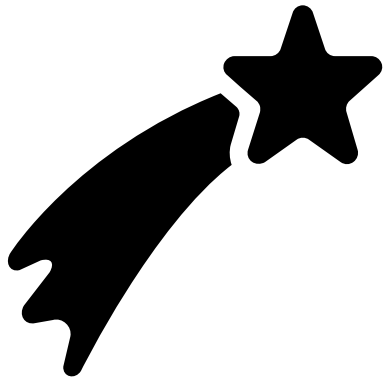


Figure 3. Fund Lead Sampling
Cathedral Park Recreational Beach Project Area
Portland Harbor Superfund Site

DRAFT – FOR PRELIMINARY DISCUSSIONS ONLY
DO NOT CITE OR QUOTE – SUBJECT TO CHANGE

QUESTIONS?

WE LOVE YOUR QUESTIONS! THANK YOU FOR ASKING!



Summarize + Discuss **Next Steps**

- ✓ Action Items?
- ✓ Should we have a June meeting?
  - ❑ If so, please take the **poll**
- ✓ Proposed Topics for Next Meeting?
  - ❑ Review of final Quality Assurance Project Plan (QAPP)
  - ❑ Continue discussion and development of educational activities
- ✓ File Viewing & Sharing (Lucila)

Thank You!